

ABSTRACT OF THE DISCLOSURE

In an actuator of the invention, coils are kept from being displaced along a y-axis direction as projections of coil bobbins are sandwiched between first and second iron cores along the y-axis direction. Also, the coils are kept from being displaced excessively along x- and z-axis directions due to shocks, for instance, as they are fitted in groovelike channels formed in the first and second iron cores. Since two bearings are sandwiched and fixed between third and fourth iron cores along the x-axis direction, the bearings can be easily set on a common axis with high accuracy. It is therefore possible to prevent displacement of the coils during operation of the actuator. Slidable support plates ensure smooth movements of an armature and thereby provide improved reliability even when the distance between the support plates and the first to fourth iron cores is reduced.